USGS science for a changing world

GSN

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M 7.6, SOUTHERN SUMATRA, INDONESIA

Origin Time: Wed 2009-09-30 10:16:09 UTC
Location: 0.73˚S 99.86˚E Depth: 81 km

PAGER
Version 5
Created: 1 days, 20 hrs after earthquake

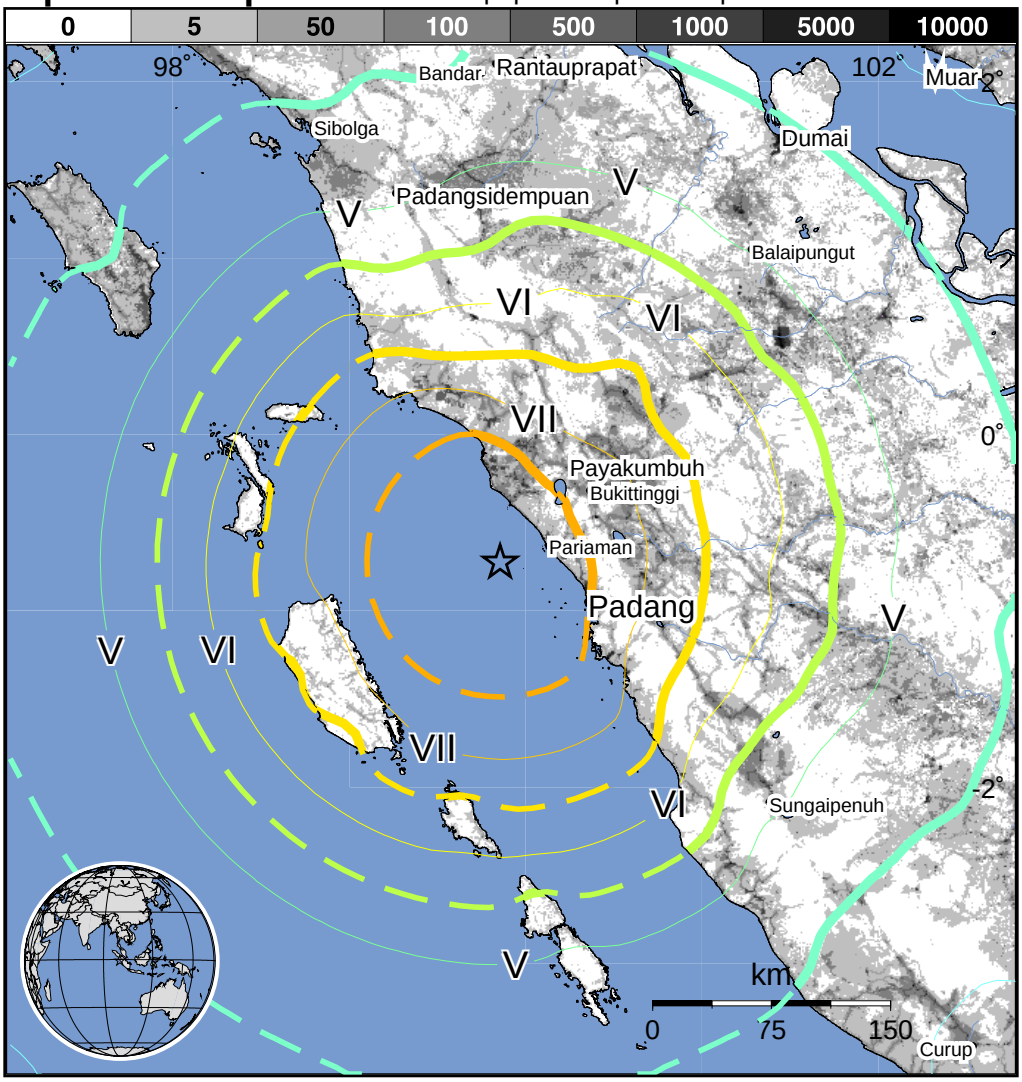
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k = x1000)		- -*	207k*	2,234k*	6,222k	1,625k	3,277k	884k	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	none	none	none	V. Light	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy
	Vulnerable Structures	none	none	none	Light	Moderate	Moderate/Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per ~1 sq. km from Landscan 2006



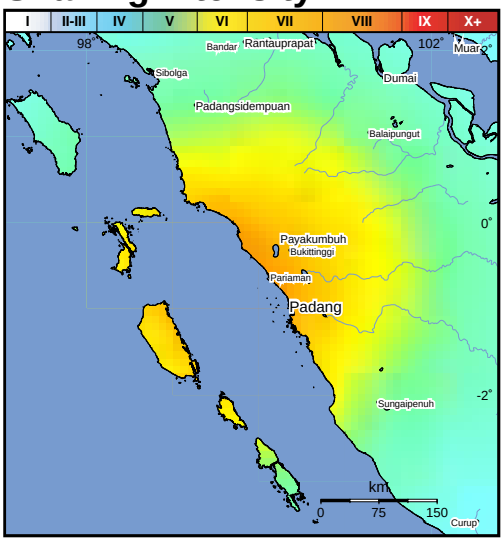
Selected City Exposure

MMI	City	Population
VIII	**Pariaman**	**92k**
VIII	**Bukittinggi**	**98k**
VII	**Payakumbuh**	**121k**
VII	**Padang**	**840k**
VII	Solok	48k
VII	Sijunjung	27k
V	**Sungaipenuh**	**95k**
V	**Rantauprapat**	**103k**
V	**Dumai**	**143k**
IV	**Muar**	**127k**
III	Melaka	180k

bold cities appear on map (k = x1000)

Shaking Intensity

MMI



Overall, the population in this region resides in structures that are vulnerable to earthquake shaking, though some resistant structures exist. On March 6, 2007 (UTC), a magnitude 6.4 earthquake occurred in the Indonesia region 70 km northeast of the location of this earthquake, with estimated population exposures of 15,000 at intensity IX or greater and 233,000 at intensity VIII, resulting in an estimated 67 fatalities. Recent earthquakes in this area have caused landslides that may have contributed to losses.